

Notice of Allowability

Application No.

09/522,819

Examiner

LUONG T NGUYEN

Applicant(s)

VODANOVIC, BOJKO

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☐ The drawings filed on ____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ ~~CORRECTED DRAWINGS~~ (as "replacement sheets") must be submitted. **Applicant MUST submit NEW FORMAL DRAWINGS!**
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 11/22/00.
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 121104.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. James Anglehart on 12/10/2004.

2. The application has been amended as follows:

In the specification, page 1 (line 3), "08/922,026 filed September 2, 1997." has been changed to --08/922,026 filed September 2, 1997, now U.S. Patent No. 6,335,757.--.

In the specification, page 5 (line 26), "CCD array array" has been changed to --CCD array--.

In the specification (Abstract page), page 16 (line 4), "interline transfer CCD sensor" has been changed to --frame transfer CCD sensor--.

3. The claims have been amended as follows:

Claim 1 (line 4), "said exposed area" has been changed to --said exposed image area--.

Claim 1 (lines 10-11), "said exposed area" has been changed to --said exposed image area--.

Claim 1 (line 11), "and for pausing" has been changed to --and for causing image acquisition pausing involving pausing--.

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Claim 1 (line 12), "profile line image" has been changed to --profile line images--.

Claim 1 (line 14), "transfer of m" has been changed to --transfer of m lines--.

Claim 1 (line 17), "reading out m lines" has been changed to --reading out of said m lines--.

Claim 1 (lines 18-19), "said image are" has been changed to --said exposed image area--.

Claim 2 (line 3), "line thereon" has been changed to --line images thereon--.

Claim 15 (line 3), "profile line" has been changed to --profile line images--.

Claim 15 (line 4), "the said masked part" has been changed to --said masked part--.

Claim 15 (line 6), "said masked portion" has been changed to --said masked part--.

Claim 15 (line 7), "profile lines" has been changed to --profile line images--.

4. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Applicant must submit NEW FORMAL DRAWINGS.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

REASONS FOR ALLOWANCE

5. Claims 1-15 are allowable.

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art of the record fails to show or fairly suggest a high speed profiling imaging system using a frame transfer charge-coupled device (CCD) sensor, comprising a frame transfer controller generating a shift control signal for said line shift transfer

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mechanism to cause a rapid transfer of m lines from said exposed image area into said protected area, and for causing image acquisition pausing involving pausing said generating of said shift control signal to allow for image acquisition of said profile line images, wherein m is less than said n horizontal pixel lines, said frame transfer controller causing said transfer of m lines to provide more than one profile image per frame period; and a read-out controller generating a readout shift control signal for said readout mechanism, said read-out controller reading out said m lines during said pausing and then pausing until said transfer of said m lines from said exposed image area is completed by said frame transfer controller.

Claims 2-15 are allowable for the reason given respect to claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pfanhouser et al. (US 4,851,914) discloses high-speed full frame imaging CCD camera.

Kokubo (US 5,298,734) discloses solid state image pickup apparatus with shutter signal and overflow drain.

Yamashita et al. (US 5,546,127) discloses solid-state imaging apparatus.

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Egawa et al. (US 5,572,256) discloses solid-state imaging apparatus.


Miethig et al. (US 5,923,370) discloses image smear and dark signal reduction device and method.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12/11/04


AUNG MOE
PRIMARY EXAMINER